West African Hygiene.

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DR GEO. W. NASH.

Alfred Love

West African Hygiene.

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OR,

HINTS ON THE PRESERVATION OF HEALTH, AND THE TREATMENT OF DISEASE

ON THE

West Coast of Africa.

BY

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Capt W. H. Chase.
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W. H. Chase
Augt 4th 1874

W. H. Chase.
Saltpond Augt 10th 1888

PREFACE.

This pamphlet is intended more especially for the information of Europeans, not belonging to the Medical Profession, who are called upon to reside on the West Coast of Africa. I have therefore only noticed such Diseases of the Coast as are most prevalent and most dangerous, and in which some knowledge of effectual remedies might save fatal delay.

I have endeavoured to make myself intelligible to any unprofessional reader, and I have for that reason avoided the use of technical terms.

If the hints embodied in these pages prove of service to Europeans—especially when stricken with sickness, and far from skilled assistance—I shall be well rewarded; and I should be abundantly gratified to find that my efforts have not been entirely useless.

C. S. G.

Elmina,
March, 1882.

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West African Hygiene.

CHAPTER I.

General advice towards the preservation of health.

Clothing. Wear flannel next to the skin, or, if flannel be much disliked, wear "Oxford" shirts with under-vests of cotton.

Sleep in soft flannels.

Wear cotton drawers.

Serge, flannel, or very light tweed are the best materials for outer clothing.

Diet. Take two principal meals in the day; *e.g.* at 10 a.m. or 11 a.m., and at 6 p.m. or 7 p.m.

In addition, shortly after rising in the morning and before leaving the house or tent, *always* take a cup of

coffee, tea, or cocoa, together with a little toast, and an egg or two, either boiled or whipped up in the beverage. *It is highly imprudent to expose oneself, or to commence work, without having previously taken a light repast such as the above.*

Endeavour to procure good, simple, and nutritious food for the daily meals.

Make a point of having vegetables whenever practicable.

Resist the inclination to constantly partake of highly seasoned dishes, curries, and the like.

Fruit in moderation is wholesome, but should *not* be eaten after dinner.

Alcoholic stimulants must be either abstained from altogether, or only used in the strictest moderation.

Drink.

Brandy, ought *never* to be touched, unless ordered medicinally by a physician.

Claret, hock, or German lager-beer, may be drunk with the meals; of course not immoderately.

If a man has been a total abstainer before coming to the Coast, my advice to him is,—*Remain a teetotaler.*

The exception to that is only when illness necessitates the use of alcoholics, *in the opinion of the medical adviser.*

If a man has been a temperate drinker before coming to the Coast, let him remain such, and only be more strict than ever in his temperance.

If a man has been a free liver, it is absolutely essential that he should change his habits without delay, or the climate of the Coast will terribly revenge itself for his bravado and folly.

Of spirits, brandy is the worst form of poison; gin, rum, and absinthe next in degree of noxiousness. Old Scotch or Irish whiskey, *in great moderation, well diluted*, and *never taken on an empty stomach*, is perhaps the least deleterious of spirituous liquors and the slowest poison.

A little good champagne, *occasionally*, when one is exhausted or out of sorts, is a useful and safe stimulant.

Coffee and tea are both excellent restoratives for the fatigued body or wearied brain, and are far better in the performance of hard work than alcohol.

Over-eating.

New-comers are disposed to eat too much, an error to be deprecated equally with that of insufficient feeding. After a short sojourn on the Coast however, want of appetite will suffice to guard the European against the dangers of over-eating.

Exercise.

Walk or ride before the sun is high: that is to say,

between 6 a.m. and 10 a.m.; also when the sun is declining, *i.e.* between 4.30 p.m. and 7 p.m.

Exercise is beneficial and necessary, but over-fatigue is very dangerous. To expose oneself unnecessarily to the sun is as foolish as it is nearly certain to be attended with injurious effects.

Morals.

Great *moderation* in the indulgence of the sexual passion is advisable.

Cultivate an impassive and philosophic temperament; as irritability, a very universal product of the climate, renders a man uncomfortable, and has undoubtedly a bad influence on the general health.

CHAPTER II.

Medicinal, and other preventive measures against Diseases peculiarly incidental to the Coast.

Before entering on the treatment to be followed in the various diseases which I am shortly about to notice, I desire to impress upon Europeans serving on the Coast, the great value of certain prophylactic measures for the prevention of diseases induced by the climate, or, at least, for the mitigation of their severity and danger when they do supervene.

These measures are the result of practical experience, and they will, I hope, be carefully observed by such readers as are satisfied to take my advice.

Quinine.

A small dose of Quinine—two to three grains—should be taken *daily*. The time for taking the dose should be either after the early breakfast—when duty necessitates exposure in the morning—or half-an-hour before the evening meal.

Quinine can be taken in the form of a pill, if the solution is found to be disagreeable.

A larger dose ought to be taken occasionally, *e.g.*, after a bad wetting, or after a day of extra hard work. Four or five grains of Quinine taken on such occasions, followed by a cup of good coffee, will often prevent an incipient attack of fever.

The Bowels. Great attention must be paid to the state of the bowels. Constipation is the usual effect of the climate; partly, because little exercise can be taken; partly, because it is difficult to get green vegetables, or to vary the diet; partly, because of the excessive heat; and, in a great measure, on account of a subtle malarious poison which pervades the atmosphere, and which renders the liver inactive in its functions.

Fruit. *Therefore*, make use of fruit as an habitual laxative; but remember, nevertheless, that *inordinate* consumption of fruit may bring on Diarrhœa—a condition to be avoided equally with that of Constipation.

A banana or two, a couple of oranges, half a ripe papaw with some juice of the lime—any of these, but *not all three*—will be found pleasant, safe, and generally efficacious in promoting regular action of the bowels, if taken in the morning on rising, and a short time before anything else is eaten.

Occasionally a more active and special stimulus to the liver will be necessary. For example: two or three of "Cockle's Pills," or a few grains of Rhubarb, Calomel, and Ipecacuanha, as combined in the "antibilious pills," for which I have given a formula in the appendix. A dose of "Lamplough's Pyretic Saline," with the juice of a lime, is also a very safe aperient, and will assist the action of the pills should they fail to operate satisfactorily of themselves. Aperients

A cold bath should be taken daily, unless contra-indicated by indisposition. A shower-bath also is very refreshing and tonic to the system. Bathing.

The bath should be taken about one hour before the first chief meal of the day. If, however, about to start on a journey, the bath had better be taken in the morning, just before the usual light breakfast, and before setting out.

The body should be washed *all over* every day with soap. "Calvert's Carbolic Acid Toilet Soap," and "Coal-tar Soap," are kinds I specially recommend. Soap.

Before using the shower, it is a good plan to rub the body over with the juice of fresh limes. This is not only a preservative against the "prickly heat," but is also a cure for that very irritating affection. Prickly Heat.

The least feeling of chill, shivering, or repugnance to the bath Chills.

generally means mischief. It is an indication that the bath must be abstained from on that day.

After Exercise.

On returning home after work, or a journey, the underclothing—which is generally more or less soaked with perspiration—should at once be changed. The entire person should, at the same time, be rubbed down with a wet towel. If much fatigued, a tepid bath, with a cold shower or douche just before getting out of the tub, will be found most refreshing and salutary.

Protection of the Head.

A good helmet ought always to be worn out of doors, and an umbrella should be used. Remember,—*Once sunstruck, always sunstruck!*

CHAPTER III.

Malarious Fevers.

In this climate, the cold sensations and shivering which usually usher in Intermittent Fever (or Ague) and other forms of fever induced by malarious poisoning, are by no means invariable symptoms. Indeed, I think their presence in a marked degree is exceptional. Symptoms.

The symptoms most generally experienced, and which attract the attention of the sufferer, are—headache, pains in the back and legs as if from over-exertion, lassitude, loss of appetite, and thirst. There may also be nausea and vomiting. If, together with these symptoms, the clinical thermometer shows an elevation of temperature, even of only one degree, fever is imminent.

This, therefore, is the stage at which remedies ought to be had recourse to, to mitigate the severity and curtail the duration of the developing fever. The proper remedial measures are: Remedies.

The Bowels. *To induce action of the bowels, if they have not been freely moved.* For this purpose an active purge should at once be taken, as for example, an ounce of Epsom Salts or of Glauber's Salts; or twenty grains of Jalap with two or three grains of Calomel. If the stomach be very sick the Calomel may be taken alone, followed, after an hour, by a table-spoonful of Pyretic Saline with fresh lime-juice.

The patient must get to bed at once, and must cover himself with blankets.

Should the bowels have been well moved before the above-mentioned symptoms were noticed, the purgative need not be taken, but instead of it, a dessert-spoonful of "Warburg's Fever Tincture" must be taken at once, a dose which is to be repeated after the lapse of one hour and a half, should the skin remain dry.

The Skin. *To encourage free action of the skin* some warm beverage should be freely taken: tea, tamarind water, lime-juice, or lemonade. In addition, and if it be at hand, a teaspoonful of Mindererus' Spirit *(Liquor Ammoniæ Acetatis)* in a wineglassful of water. This is to be repeated every hour or two, until free perspiration is induced.

After the sweating has continued for one or two hours, relief from headache and other symptoms should indicate a subsidence of the fever. This condition may be ascer-

tained beyond doubt by means of the clinical thermometer, if that is at hand. The time has now arrived for another remedy.

Quinine. *A large dose of Quinine—ten grains—is now to be taken.* It is to be combined with a little Epsom Salts or Glauber's Salts, if the bowels are still constipated. The dose of Quinine is to be repeated in six hours time.

Return of Fever. A return of the fever may be expected after an interval of twelve hours, and about the same time of day as that at which it first commenced. *One hour* before this time, another large dose of Quinine should be taken, in order to stave off—if that be possible—the returning paroxysm.

If, however, in spite of this preventive dose, the sensations of the patient clearly inform him that the enemy is again taking possession, then, "Warburg's Fever Tincture" must be had recourse to, and the same remedial process carried out as I have indicated in the first instance.

Continuance of Quinine. The taking of the Quinine is to be continued in the intervals of freedom from fever—during the *intermissions*, that is to say—until the following sensations are noticed: singing in the ears, deafness, and throbbing of the temple arteries. These symptoms indicate that the drug has produced its physiological effects upon the system, *Now* the dose is to be decreased to a half or to a quarter the amount.

Precautions, however, *are not to be relaxed*. A return of the fever *must be looked for and expected*, until entire freedom from fever shall have lasted for *at least forty-eight hours*. The patient may then, and only then, congratulate himself on being safe from a recurrence, so far as that particular attack of malarious fever is concerned.

Remittent Fever.

When the fever is of the type known as "remittent," it is characterised by not disappearing entirely in the intervals, but by only subsiding in intensity. It continues in a slighter degree during the periodical remissions.

This type of fever is more obstinate and more distressing than the true intermittent form. It is in these fevers that the clinical thermometer is of so much use. It indicates with exactitude when the fever is *abating*, and, as the periods of remission are the times when Quinine should be taken, the clinical thermometer is a sure guide in the use of that valuable specific.

Vomiting.

When nausea or vomiting are prominent symptoms, a strong mustard poultice should be applied to the pit of the stomach, just below the breast-bone, and a little to the left. The patient may also be relieved by taking ten to twenty grains of Bicarbonate of Soda, together with two drops of Chloroform, or thirty drops of Chloric Ether, with a little lime-juice drink occasionally.

If the headache is very distressing, the juice of half-a-dozen limes may be rubbed into the hair, and a jugful of cold water may be poured over the head. This usually soothes and gives considerable relief. Headache.

During the fever, baths are not to be taken, unless under the immediate advice and supervision of a medical man. The body may, however, be sponged with tepid water, to which may be added the juice of limes, or Eau-de-Cologne, or Toilet Vinegar. When sponging is done, the *whole body* is not to be exposed at once, but *first one part and then another* is to be sponged, in order to avoid the risk of taking a chill. Sponging.

Should the skin continue dry in spite of the remedies already advised, or should the stomach reject those remedies, then I advise the "cold pack." It may be used at the onset of the fever if other remedies are not at hand, or, in addition to them. The following is the mode of employing it:— The Cold Pack.

Spread out two thick blankets on the floor or bed, with a couple of pillows *under them* at the head. Upon these blankets place a large sheet, wrung out of cold water. Let the patient lie down at full length upon the sheet, the arms placed against the sides. An attendant is then to rapidly fold the wet sheet round the body, from the chin to the feet. The blankets are similarly to be tightly

rolled round the body, over the sheet, and more coverings may be heaped over all.

The patient may remain in the pack for twenty minutes to one hour, according as his sensations indicate its effect on him. On coming out of it, the body should be rapidly rubbed over with a dry sponge or towel, and the patient should return at once to bed.

Effects of the Pack.

The cold pack seldom fails in inducing perspiration, and in lowering the temperature. It also generally relieves nausea and vomiting, and frequently produces refreshing sleep. It is not disagreeable; on the contrary, patients usually enjoy it. Although its administration is a little troublesome, yet it is so safe, and so efficacious an adjuvant of treatment, that it should not be neglected.

Diet in Fever.

The strength must be supported during fever. Strong broths, eggs beaten up in milk, tea, or water, and such-like easily assimilable forms of nutriment are to be had recourse to. A little champagne and soda-water may be taken, if there is much nausea, vomiting, or exhaustion.

Recovery.

Lastly, after an attack, great care should be exercised in resuming the ordinary diet and mode of life. The daily bath should not be taken *quite cold* for several days after recovery. And the entire disappearance of the fever is not to be regarded as certain, unless the temperature shall have remained normal for at least forty-eight hours, as before mentioned.

CHAPTER IV.

Diarrhœa and Dysentery.

Diarrhœa. DIARRHŒA is often brought on by errors of diet, either in eating or drinking. Indulgence in such articles as crabs or crawfish, uncooked mangrove oysters, too much fruit, English ale and stout, is often followed by sharp and painful diarrhœa.

It is not natural that purging should continue for more than a few hours in health, and remedies should be used to arrest it if it be more persistent.

If, however, the purging has been produced by errors of diet, and if the evacuations are large, it will be well to allow two or three motions to pass away before attempting to arrest the discharge, or to control the action of the bowels.

Remedies. The best and handiest remedy for the unprofessional patient is Dr. Collis Browne's "Chlorodyne." Of this ten to thirty drops in water may be taken for a dose, and may

be repeated every three to six hours, according to its effect and to the persistency of the symptoms.

In place of Chlorodyne there may be taken ten drops of Laudanum, together with twenty drops of Tincture of Ginger, in water. Or, instead of that, twenty grains of Bicarbonate of Soda, together with twenty grains of Subnitrate of Fismuth. The dose of either may be repeated every three or four hours, until relief is experienced.

Colic.

Occasionally, diarrhœa is attended with colicky pains, and with scanty evacuations which give no relief. In such a case there is probably some irritant material in the intestinal tract. The appropriate treatment, therefore, would be a dose of castor oil. Or, instead of that, ten grains of Rhubarb with twenty grains of Bicarbonate of Soda.

After treatment.

For a day or two after the attack is over, an occasional dose of Bismuth and Soda will be advisable, and, if necessary, a dose of Chlorodyne. Animal food should be abstained from until recovery. The most suitable diet consists of arrowroot or cornflour, with milk or water, and chicken-broth.

Dysentery.

Dysentery is very common on the coast, and its effects are frequently most disastrous. Nevertheless, it yields easily to treatment, if that treatment is judicious and commenced in time.

Nature of it.

In no disease is it more important that immediate measures for checking it should be taken. It is a disease characterised by an ulcerated condition of the large bowel. Every day's neglect naturally leads to the further development of the ulcers, and therefore tends to increase the danger to the patient. Moreover, even when the disease does not prove immediately fatal, it is apt, if neglected in its earlier stages, to pass into chronic dysentery, a condition which renders life a veritable burden.

Causes: Water.

Impure drinking-water is undoubtedly a very frequent cause of dysentery in malarious countries. *Therefore*, be constantly most careful in respect to the water, used for drinking and in cooking. Always have it filtered, and *take care that the filter itself is clean*. Water, when very bad, should be both boiled and filtered, and if it seems to contain much impurity, a few grains of alum should be added before passing it through the filter.

Wet and cold.

Wet and cold are also frequent exciting causes of dysentery in this climate. *Therefore*, their influences should be avoided and guarded against as much as possible. Wet clothing should be changed as soon as practicable. Take an additional dose of Quinine if unavoidably exposed to wet weather, if living in leaky quarters or if camped on or near marshy ground.

Errors of Diet.

Abuse of stimulants, immoderate indulgence in fruit, or the habit of constantly eating highly spiced and peppery dishes, are all indirect causes of dysentery. So, too, is anything which irritates or over-stimulates the stomach, producing congestion and irritation of the mucous membrane of the large intestine.

Malaria.

Dysentery is not a purely local disease, though its manifestations appear so. It is a disease depending on that insidious and mysterious poison *Malaria*, and the causes already enumerated are really only sub-agents to that poison in setting up the disease. The mischievous influence they exert is due, in great measure, to the vitiation of the system induced by exposure to malaria.

Symptoms.

Dysentery usually commences with diarrhœa, which, for a few days, or perhaps only for a few hours, appears of an ordinary type. In some cases it is very insidious in its development and progress. This may be so slow and indolent that, for days and even for weeks, the sufferer may be ignorant of his true disease. *Therefore, never neglect or make light of diarrhœa in a tropical and malarious climate.*

It is not natural that diarrhœa, unless purposely excited by medicines, should continue for more than twelve hours at the outside. Speaking generally, it should not be allowed to continue longer.

In dysentery however, the purgings are more frequent from the first, as a rule, than in simple diarrhœa. The evacuations are more scanty and scalding and the pain is more constant. Almost invariably there is a very distressing sensation of weight, and an apparent want of unloading about the fundament and lower bowel. This last symptom is very distinctive. Distinctions between Dysentery and Diarrhœa.

The colicky pains are of a very sickening character, and are mainly localised about the navel. The scanty evacuations contain blood and mucus, having a slimy appearance, and giving off a peculiarly fœtid odour. The calls to stool are very frequent, though but little is passed.

. Fever is not an invariable concomitant, but may, of course, be present. The stomach is generally sick, and the sufferer is languid, having a repugnance to food of any kind. The tongue will be foul with red tip and edges, or it may be, not infrequently, unnaturally clean and bright red.

Fortunately, we have in *ipecacuanha* a specific for dysentery, if the disease be taken in time. Even in the most advanced and hopeless forms of the malady, this invaluable drug often arrests and obviates the fatal termination which appears so near. Treatment.

The remedy is perfectly safe, so that, even if a dose of it be taken under a false alarm of dysentery, it will do no harm, nay! will probably prove beneficial. The objections to it are its bulkiness, and its emetic properties. But perseverance, and a strict observance of the following directions, will nearly always enable the patient to retain it.

How to take Ipecacuanha in Dysentery.

Go to bed.

Abstain from all food or drink for one or two hours before taking the medicine, and for the same period after taking it.

Put a mustard poultice on over the pit of the stomach, as advised in fever. Or, instead of it, put on a piece of linen moistened with a few drops of pure chloroform.

Take, at the same time, twenty to thirty drops of either laudanum or chlorodyne in a little water.

When becoming drowsy take twenty to forty grains of ipecacuanha, suspended in half a wineglassful of water, which may be flavoured with bitters if desired.

If the ipecacuanha is vomited, wait for two hours and then try again, reducing the dose by one half.

If it is retained, repeat the dose in the same manner in six or eight hours time.

Subsequently, take a dose every twelve to twenty-four

hours, for two or three days. When all acute symptoms are relieved, take a dose of two or three grains every six hours in the day, with five to fifteen drops of chlorodyne. This may be continued for another three days.

After constipation.

Constipation sometimes succeeds the purging, after treatment. In that event, purgatives are only to be resorted to with extreme discretion. The very mildest should alone be used. For example; one tablespoonful of castor oil, or five grains of rhubarb with a grain or two of ipecacuanha.

Other remedies.

If unhappily, ipecacuanha can not be retained, in spite of perseverance in the aforementioned method of taking it, another remedy must be had recourse to. The next best will be the *pills of lead and opium*,* of which two or three may be taken in the day, or the Soda and Bismuth powders, with a few drops of Laudanum.†

Chlorodyne is also a good remedy, and will at least control the malady until skilled advice can be obtained. Hot stupes, or poultices, will be found grateful, and will relieve the colic and the nausea.

In convalescence.

During convalescence an alterative tonic will be of service. Such an one may contain sal ammoniac, with tincture of steel, and dilute hydrochloric acid.

* Vide Appendix. † Vide Diarrhœa.

Diet is of the first importance, and must consist of food easily assimilated in the stomach, *so as to allow of as much rest as possible to the ulcerated bowels.*

Diet in acute stage.

No meat, fish, or fowl may be taken in substance during the acute stage. No fruit, potatoes, or other vegetables. No alcohol, unless in exceptional cases of great prostration, when a stimulant to support the powers of life through the ordeal is absolutely necessary. In such cases, a little champagne in small quantities at short intervals, will often tide the patient over the critical period. Or a little brandy, with an egg beaten up in warm milk and water, may be given.

The most appropriate forms of food will be—milk, with soda-water or lime-water; arrow-root; tapioca; sago; Revalenta arabica; strong broths well strained; raw eggs beaten up with milk or water.

Beverages.

Drink should be taken sparingly. The most refreshing and the safest beverages are—water with the juice of one lime to the tumblerful; a little claret and water; a little champagne and soda-water; or a slightly acid and astringent drink, such as can be made by adding a teaspoonful of dilute hydrochloric acid to a quart of pure water.

Diet during recovery.

Return to the ordinary diet must be exceedingly gradual, and the sufferer must be most careful in this respect for some weeks after apparent recovery.

Relapses are frequent and often fatal, when this caution is neglected. The ulcers, *not entirely healed up*, may, by any indiscretion, be again irritated into destructive action, to the reproduction of all the acute symptoms, and to the disappointment and danger of the patient.

Festina lente:—Give Nature time, and do not ask a weakened part of the body to resume the old work in its entirety too soon.

APPENDIX.

The Clinical Thermometer.

The clinical thermometer should be self-registering. It should have an index within the tube, which will be pushed up by the ascending mercury, and which will remain *in situ* when the thermometer is taken from the patient's body, so that the temperature may be read off after the column of mercury has fallen back into the ball.

Before using the thermometer, the index must be shaken down by gently tapping the thermometer against the palm of the hand, until the top of the index is at or below 98°. The instrument may then be placed in the mouth, *below the tongue*, the lips being closed upon it. It should be kept in that situation for not less than two minutes. The point on the scale to which the *top* of the index has reached will indicate the temperature of the body.

The temperature may also be taken by placing the thermometer in the armpit, the arm being brought over it close to the side, the forearm lying across the chest.

The normal temperature in health should not exceed 98°.5 Fahr.; 99° Fahr. indicates impending mischief; and 100° Fahr. is fever.

The Cold Bath in Fever.

I have not mentioned this agent in my previous remarks, as it is undoubtedly a dangerous remedy in unskilled hands. However, there are cases where I believe that an unprofessional man would be fully justified in using it, as a resource when other remedies had been applied and had failed, and when the life of a comrade was in extreme danger, and no professional assistance within reach.

Such cases are those where, in spite of every other mode of treatment, the temperature remains very high—105° Fahr. or over that—for a considerable period, and where the strength is fast failing in consequence.

In such an emergency, I advise that a large tub be filled as full as possible with cold water. The patient is to be lifted into this, his body being submerged as completely as may be practicable, while his head is douched with cold water. He should remain in the bath from ten to thirty minutes according to its effect on him, which is to be judged by his pulse and sensations.

On removal from the bath the patient's body is to be rubbed down quickly with a warm towel or sheet, and he is then to be put to bed. He may be covered with a blanket, but clothes should *not be heaped on him* immediately after the cold bath.

This treatment often affords the only hope of saving life, and snatches the sufferer out of the very jaws of death. The bath usually reduces the temperature by two or three degrees. It must be repeated if the temperature again rises to, *or nearly to*, the height at which it stood before the bath.

Of course, so powerful a remedy must be employed with all caution, but I consider that it should be tried in such cases as I have indicated, when otherwise death would be inevitable.

Articles which should form part of the Outfit.

Bedstead and Bedding : including blankets, pillows, &c.

Shower-Bath.

Easy-Chair.

Lamp.

Culinary Utensils.

Dinner Service.

Knives and Forks.

Filters : One for quarters, to hold half-a-gallon ; and one pocket-filter for use when travelling. Be careful to get filters which can be easily cleansed and renovated by yourself. Charcoal, or charcoal and spongy-iron *(Carferal)* are the best filtering media.

Two Clinical Thermometers : self-registering.

Quinine : 1 oz. Also 100 Quinine pills, two and a half grains in each, and made up with acid so as to be soluble. Medicines

Chlorodyne : 2 oz. (Collis Browne's.)

Chloroform : 1 oz.

Sal Volatile : 2 oz.

Tincture of Ginger : 2 oz.

Warburg's Fever Tincture : 4 oz.

Soda Bicarbonate : 2 oz.

Bismuth Subnitrate : 2 oz.

Rhubarb : 2 oz.

Pills of Lead and Opium : 2 dozen. These should be of four grains each, prepared as ordered in the British Pharmacopœia. One may be taken every three or four hours, in dysentery.

Ipecacuanha : 2 oz. Half might be made up in separate powders, each of twenty grains.

Lamplough's Pyretic Saline : 2 bottles.

One Measure-Glass : 2 oz. size.

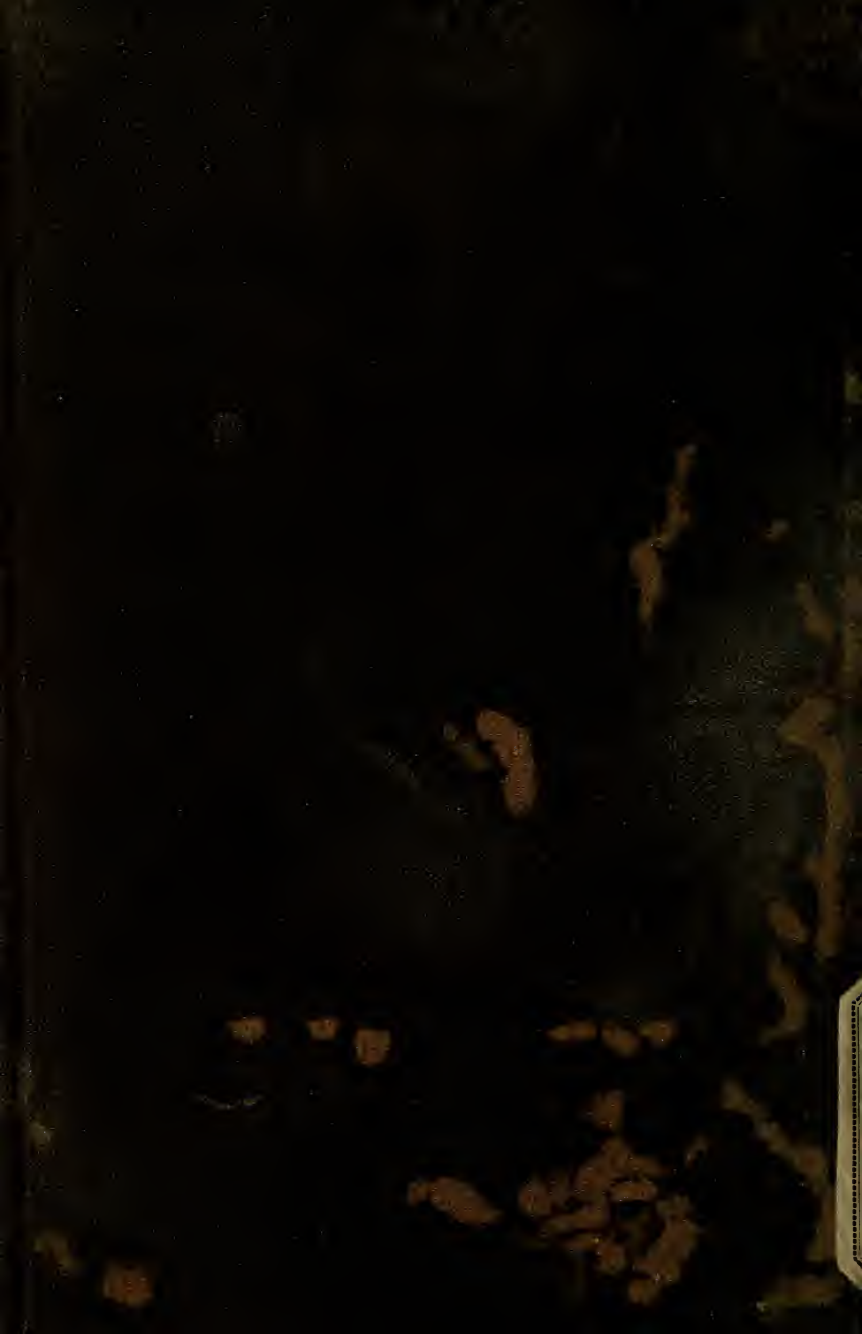
One Drop-Measure-Glass.

Antibilious Pills, 2 dozen. The following is my prescription.

Take of

Calomel,	Grains	12
Ipecacuanha,	,,	6
Extract of Rhubarb,	,,	36
Extract of Henbane,	,,	18
Oil of Lavender,	Drops	24

Mix well, and divide into 24 pills, of which two may be taken when required.

These medicines may be conveniently arranged in a small chest or box, and each bottle or package should be distinctly and carefully labelled.

THE END.